Missouri Behavioral Risk Factor Surveillance System

2015 Key Findings





Missouri Department of Health and Senior Services Randall Williams, Director

ACKNOWLEDGEMENTS

Missouri Behavioral Risk Factor Surveillance System (BRFSS) 2015 Key Findings

Special Thanks

Thank you to the more than 7,000 Missouri adults whose telephone numbers were randomly selected for participation in the 2015 BRFSS interviews. This valuable information would not be available without your willingness to participate.

Project Management and Report Preparation

Missouri Department of Health and Senior Services Office of Epidemiology Chronic Disease and Nutrition Epidemiology Team **Jiaqing Li**, MD, PhD, Research Analyst

Phone: (573) 522-2873

Email: Jiaqing.Li@health.mo.gov **Arthur Pashi**, MA, MS, PhD, Research Analyst

Arthur Pashi, MA, MS, PhD, Research Analyst **Shumei Yun**, MD, MPH, PhD, Team Leader

Data Collection (Interviews):

University of Missouri-Columbia
Department of Health Management and Informatics
Health and Behavioral Risk Research Center
William T. Wells, Ph.D., Director
Kathy McDougal, Operations Manager

The U.S. Centers for Disease Control and Prevention (CDC), Division of Behavioral Surveillance provides support to state BRFSS programs through funding, primary data analysis and technical assistance.

Suggested Citation: Li JQ, Pashi A and Yun S. 2015 Missouri Behavioral Risk Factor Surveillance System Key Findings. Jefferson City, MO: Missouri Department of Health and Senior Services, Office of Epidemiology, April 2017.

Contents

Introduction	4
Key Findings	5
General Health Measures	
Disability	
Access to Health Care	
Health Risk Behaviors Current Cigarette Smoking and Quitting Secondhand Smoke Exposure Electronic Cigarette Use Smokeless Tobacco Use Physical Inactivity Heavy and Binge Alcohol Drinking Lack of Seatbelt Use	
Chronic Conditions and Diseases Overweight Obesity Arthritis Depressive Disorders Diabetes Current Asthma Chronic Obstructive Pulmonary Disease Cancer Heart Attack Coronary Heart Disease Stroke Kidney Disease Childhood Asthma	8
Preventive Practices Immunizations HIV Testing	
Health Literacy and Social Context Health Literacy Social Context	9
Policy and Environmental Change Support for Smoke-free Laws	

INTRODUCTION

The Missouri Behavioral Risk Factor Surveillance System (BRFSS) is an annual telephone survey of adults age 18 and older that collects a range of information on health issues. BRFSS data are used to identify emerging health problems, establish health objectives and track their progress, and develop and evaluate public health policies and programs.

A total of 7,307 adults were interviewed January through December 2015 by the Health and Behavioral Risk Research Center at the University of Missouri-Columbia. Randomly selected household landline telephone numbers were called and an adult was randomly selected to participate in the survey. Additionally, randomly selected adult cell telephone users participated in the interview. Data from the landline and cell telephone interviews were aggregated and weighted by the U.S. Centers for Disease Control and Prevention (CDC) to be representative of non-institutionalized adults in Missouri. This report summarizes key findings from the survey.

Please note: The CDC began using new weighting methodology in 2011 that allows the data to be more representative of the adult population. A description of the new methodology may be found at http://www.health.mo.gov/data/brfss/data.php. Data from 2011 and later should not be compared to data prior to 2011 because of the new weighting method.

The 2015 BRFSS revealed improvements among Missouri adults in the following areas:

- 84.9 percent of adults ages 18-64 had health care coverage, a significant increase from 78.7 percent in 2011.
- 91.5 percent of adults ages 55-64 had health care coverage, a significant increase from 86.3 percent in 2011, and the coverage among adults ages 18-24 also significantly increased from 69.6 percent in 2011 to 80.2 percent in 2015.
- 22.3 percent smoked cigarettes, a significant decline from 25.0 percent in 2011
- 75.1 percent supported local laws that make all indoor workplaces smoke-free, a significant increase from 69.5 percent in 2011
- 68.3 percent supported a change in Missouri law that would make all indoor workplaces smoke-free statewide, a significant increase from 64.4 percent in 2011
- 79.8 percent always uses a seatbelt when driving or riding in a vehicle, increasing from 2014 (78.0 percent)
- 25.9 percent of adults with annual household incomes of less than \$15,000 had no health care coverage, a decline from 2014 (31.4 percent)
- 33.9 percent were overweight compared to 35.4 percent in 2014

However, the following health concerns were found among Missouri adults:

- 40.7 percent of adults with annual household incomes of less than \$15,000 smoked cigarettes
- 32.4 percent were obese
- 29.3 percent had been diagnosed with arthritis by a doctor
- 27.0 percent had not engaged in leisure time physical activity during the past 30 days
- 25.1 percent were limited in activities due to physical, mental or emotional problems
- 22.0 percent of males engaged in binge drinking of alcohol (5 or more drinks on one occasion), while 11.6 percent of females engaged in binge drinking of alcohol (4 or more drinks)
- 21.8 percent had a depressive disorder
- 13.8 percent did not see a doctor when needed in the past 12 months due to cost

In general, a consistent finding from the survey is that adults who have the lowest education levels and annual household incomes compared to those with the highest education and income levels were less healthy, engaged in health risk behaviors to a greater extent, and were less likely to have health care coverage.

2015 BRFSS KEY FINDINGS

General Health Measures

Most Missouri adults (82.2 percent) had excellent, very good or good general health while 17.8 percent had fair or poor health. More than one-third (41.3) of adults with an annual household income of less than \$15,000 had fair or poor general health. More than one-quarter of adults (26.6 percent) experienced poor physical health on three or more of the past 30 days. Twenty-five (25.3) percent had mental health that was not good on three or more of the past 30 days. Thirty-four (33.5) percent were kept from doing their usual activities on three or more of the past 30 days due to poor physical or mental health.

Disability

Twenty-five (25.1) percent of Missouri adults were limited in activities because of physical, mental or emotional problems including 45.2 percent of adults with annual household incomes of less than \$15,000.

Because of physical, mental or emotional problems, 11.1 percent of adults had serious difficulty concentrating, remembering or making decisions, and 8.5 percent had difficulty doing errands alone such as visiting a doctor's office or shopping.

Sixteen (15.7) percent of adults had serious difficulty walking or climbing stairs. Five (4.6) percent of adults had difficulty dressing or bathing. Eleven (10.9) percent of adults had a health problem that required them to use special equipment, such as a cane, wheelchair, special bed or special telephone. Four (4.2) percent were blind or had serious difficulty seeing, even when wearing glasses.

Access to Health Care

In Missouri, the percentage of adults without health care coverage declined significantly from 17.5 percent in 2011 to 12.1 percent in 2015. The decrease was significant in age groups 18-24 years (19.8 percent vs 30.4 percent), 45-54 years (10.6 percent vs 16.5 percent) and 55-64 (8.5 percent vs 13.7 percent), but was small in the other age groups when compared with the data in 2011. A significantly greater percentage of African-American adults (18.1 percent) did not have health care coverage compared to white adults (10.2 percent). A significantly greater percentage of adults with annual household incomes less than \$15,000 (25.9 percent) or between \$15,000 and 24,999 (26.6 percent) had no health care coverage compared to those with incomes of \$25,000-34,999 (12.2 percent), \$35,000-49,999 (10.9 percent), \$50,000-74,999 (6.0 percent), or \$75,000 and greater (3.0 percent). The percentage of no health-care coverage decreased significantly in the households with lower incomes from 2011 (less than \$15000, 32.8 percent; \$15000-24999, 31.5; \$25000-34999, 18.8) to 2015 (less than \$15000, 25.9 percent; \$15000-24999, 26.6; \$25000-34999, 12.3), but declined only slightly in the groups with incomes of \$35000 and higher.

Among adults who had health care coverage:

- 52.5 percent had primary coverage through an employer or union or another person's employer
- 25.5 percent had through Medicare
- 10.6 percent, through a personal plan or other family member's plan
- 5.1 percent, through Medicaid or another state plan
- 4.6 percent, through a military plan, and
- 2.7 percent, through the Indian Health Service or some other source.

Fourteen (13.8) percent of adults needed to see a doctor in the past 12 months but could not because of the cost, including 27.0 percent of those with annual household incomes of less than \$15,000 and 27.6 percent of those with incomes of \$15,000-\$24,999.

Seventy-nine 79.1 percent of adults last had a routine checkup within the past two years, 19.6 percent last had a checkup two or more years ago, and 1.3 percent had never had a checkup.

Health Risk Behaviors

Current Cigarette Smoking and Quitting

Twenty-two (22.3) percent of Missouri adults smoked cigarettes every day or some days, a *significant* decline from 25.0 percent in 2011. In 2015, a significantly greater percentage of adults with less than a high school education (43.1 percent) smoked cigarettes than adults with a high school education or GED (26.2 percent), some post high school education (20.6 percent) or a college degree (8.9 percent). More than one-half (58.3 percent) of current smokers stopped smoking for one day or longer in the past 12 months because they were trying to quit. Among adults who had stopped smoking, 14.4 percent last smoked a cigarette within the past 12 months, 17.0 percent one to five years ago, 10.7 percent five to ten years ago and 57.5 percent ten or more years ago.

Secondhand Smoke Exposure

Among adults employed for wages and self-employed, 80 percent worked indoors most of the time at the job. Among those working indoors most of the time, 8.9 percent said that someone smoked in their work area in the past seven days.

Electronic Cigarette Use

Twenty-six (26.4) percent of Missouri adults had ever used an electronic cigarette. Six (6.3) percent used e-cigarettes every day or some days. Almost one-half (45.0 percent) of those that had tried e-cigarettes did so primarily because they were trying to quit using regular tobacco products. Twenty five (24.5) percent used e-cigarettes primarily to try a new way of smoking, 6.2 percent used e-cigarettes because it is better for health, 5.2 percent used them to smoke in places that do not allow regular tobacco products, 0.9 percent used because of costing less than other tobacco products, and 18.3 percent used them for other reasons.

Smokeless Tobacco Use

Smokeless tobacco was currently used every day or some days by 10.3 percent of Missouri adult males.

Physical Inactivity

Twenty-seven (27.0) percent of Missouri adults had not participated in leisure time physical activity or exercise in the past month, a slight decline from 28.4 percent in 2011. A significantly greater percentage of adults with less than a high school education (38.9 percent) and a high school education or GED (34.4 percent) were physically inactive compared to adults with post high school education (24.3 percent) or a college degree (16.0 percent).

Heavy and Binge Alcohol Drinking

Six (6.2) percent of Missouri adults were considered heavy drinkers as defined by males having more than two drinks per day and females having more than one drink per day. A significantly greater percentage of males (8.0 percent) than females (4.4 percent) engaged in heavy drinking. A significantly greater percentage of males (22.0 percent) than females (11.6 percent) engaged in binge drinking on at

least one occasion during the past month. Binge drinking is defined as having five or more drinks on one occasion for males and four or more drinks for females.

Lack of Seatbelt Use

Twenty (20.2) percent of Missouri adults did not always wear a seat belt. Twenty-six (26.2) percent of males and 14.7 percent of females did not always wear a seat belt.

Chronic Diseases and Conditions

Missouri adults had the percentage of chronic conditions or diseases in 2015 as follows.

- *Overweight* 33.9 percent
 - A significantly greater percentage of males (39.2 percent) than females (28.5 percent) were overweight.
- *Obesity* 32.4 percent
 - A significantly greater percentage of African-American adults (36.9 percent) were obese than White Non-Hispanic adults (32.0 percent).
- Arthritis 29.3 percent
 - A significantly greater percentage of adults with less than a high school education (37.0 percent) had arthritis than adults with a high school education or GED (33.5 percent), some post high school education (29.0 percent) or a college degree (20.9 percent).
- *Depressive Disorder* 21.8 percent
 - A significantly greater percentage of females (28.4 percent) than males (14.7 percent) had been told by a health professional that they had a depressive disorder. A significantly greater percentage of adults with less than a high school education (29.4 percent) had a depressive disorder than adults with a high school education or GED (19.6 percent), some post high school education (25.1 percent), or a college degree (16.7 percent).
- *Diabetes* 11.5 percent
 - A significantly greater percentage of African-American adults (15.5 percent) had been told by a health professional they had diabetes compared to white adults (10.8 percent). Sixty (60.3) percent of adults had been told they had diabetes after the age of 45. Over half (56.9 percent) of adults had a test for high blood sugar or diabetes within the past 3 years. Nine (8.5) percent of adults had been told by a health professional they had pre-diabetes.
- *Current Asthma* 9.6 percent
 - A significantly greater percentage of adult females (12.3 percent) than males (6.7) percent) had asthma.
- *Chronic Obstructive Pulmonary Disease* 8.4 percent
 - A significantly greater percentage of adults with less than a high school education (19.4 percent) had been told by a health professional they had chronic obstructive pulmonary disease than adults with a high school education (8.7 percent), some post high school education (8.1 percent) or a college degree (2.5 percent).
- Cancer (Other than skin) 7.4 percent
 - 18.6 percent of adults age 65 and older had been diagnosed with a type of cancer other than skin cancer. Seven (6.8) percent of adults had been diagnosed with skin cancer, including 17.8 percent of adults age 65 and older.
- *Heart Attack* 5.3 percent
 - A significantly greater percentage of males (6.6 percent) than females (4.0 percent) had been told by a health professional they had experienced a heart attack or a myocardial infarction.
- *Coronary Heart Disease* 4.8 percent
 - A significantly greater percentage of males (5.6 percent) than females (4.2 percent) had been told by a health professional that they had coronary heart disease or angina.
- Stroke 4.5 percent

A significantly greater percentage of adults ages 65 and older (10.2 percent) had been told by a health professional that they had experienced a stroke than adults less than 65 years of age (3.0 percent).

Kidney Disease – 2.7 percent
 Less than three percent of adults had been told by a health professional they had kidney disease.

Childhood Asthma

Adults with children under the age of 18 were asked to answer questions about a randomly selected child in the household. Responses were weighted to be representative of all children in Missouri under the age of 18. As a result, it was found that 11.1 percent of children under the age of 18 in Missouri had been told by a doctor or other health professional that they had asthma. Among those that had been told they had asthma, 78.4 percent still had the condition.

Preventive Practices

Immunizations

Forty-six (45.8) percent of adults age 18 and older had the flu vaccine within the past twelve months. Among adults age 65 and older, 68.6 percent had the flu vaccine within the past 12 months. Also among adults age 65 and older, 73.2 percent had ever had a pneumococcal vaccination. Among adults age 50 and older, 22.6 percent have ever had the shingles or Zoster vaccine: Its vaccination rate was 3.1 percent in the age group of 50 to 59 years, 24.5 percent in the group of 60-64 years, and 37.9 percent in the group of 65 years and older.

Twenty-three (22.6) percent of adults age 18 and older had received the tetanus shot that also has pertussis or whooping cough vaccine. The percentage of receiving the shot was significantly lower in the adults with lower incomes (\$15,000, 15.8 percent; \$75,000 and above, 32.7 percent). Sixteen (15.6) percent of adults age 18 to 49 had ever had the vaccination of Human Papilloma Virus.

HIV Testing

Thirty-three (32.6) percent of adults age 18 and older had ever been tested for HIV. A significantly greater percentage of African-American adults (62.6 percent) than white adults (27.8 percent) had been tested. About 49 percent (48.7) of Hispanic had ever been tested for HIV.

Health Literacy and Social Context

Health Literacy

About 67 percent of Missouri adults were extremely confident in their ability to fill out health forms by themselves; 28.9 percent stated that they were somewhat confident in their ability to fill out the form by themselves, whereas 4.2 percent were unable or not at all confident to fill out health forms.

When asked how often was health information written in a way that was easy to understand, 73.0 percent reported health information was always or nearly always written in a way that it was easy to understand; 21.4 percent said it was sometimes written in a way that it was easy to understand, and for 5.6 percent, health information was never or seldom written in a way that it was easy to understand.

To the question on how often they had someone help them read health information, 9.2 percent of adults said they always and nearly always had someone help them read health information; 21.0 percent of respondents sometimes had someone help them read health information, and 69.8 percent seldom or never had someone help them read health information.

Social Context

Questions about social context included worry or stress about having enough money to pay for rent or mortgage, to buy nutritious food, and about types of payment received for the work performed and the amount of hours worked per week.

Almost 16 percent (15.5) of adults were always or usually worried about not having enough money to pay for their rent or mortgage in the past 12 months, whereas 16.7 percent sometimes worried about those issues. Sixty-eight (67.8) percent of adults rarely or never worried about having enough money to pay their rent or mortgage in the past 12 months. Twenty four (23.7) percent of Non-Hispanic African Americans were always or usually worried about having enough money to pay their rent or mortgage, whereas only 13.4 percent of Non-Hispanic Whites did so in the past 12 months. The rate of always or usually worrying was 32.2 percent among adults with less than a high school education, but just 12.6 percent among adults with more than a high-school education. In addition, the rate was 45.4 percent among adults earning less than \$15,000 per year, compared to only 4.5 percent among adults earing \$75,000 or more.

Overall, 11.4 percent of adults were always or usually worried or stressed about not having enough money to buy nutritious meals in the past 12 months, including about 10 percent (9.8) among non-Hispanic Whites and 14.8 percent among non-Hispanic African Americans. About nine (8.9) percent of adult males reported having worried or stressed about not having enough money to buy nutritious meals, which was significantly lower than 13.7 percent among female adults. The rate was 23.7 percent among adults with less than a high school education, and 11.5 percent among the adults with a high school education. Almost 35 percent (34.6) of the respondents who earned less than \$15,000 were always or usually worried or stressed about not having enough money to buy nutritious meals in the past 12 months.

Policy and Environmental Change

Support for Smoke-free Laws

Seventy-five (75.1) percent of Missouri adults would support a local law that would make all indoor workplaces in their community smoke-free, including restaurants, bars and casinos. This is a significant increase from 69.4 percent in 2011 and 72.7 percent in 2012.

Sixty-eight (68.3) percent of adults would support a change in Missouri state law that would make all workplaces smoke-free by prohibiting smoking in all indoor workplaces state-wide, including restaurants, bars and casinos. This is a significant increase from 64.4 percent in 2011, 64.7 percent in 2012 and 65.7 percent in 2013.